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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,462	12/03/2004	Chika Iri	Q84781	2867
23373 7590 12/11/2008 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
LAUX, JESSICA L.				
ART UNIT		PAPER NUMBER		
3635				
MAIL DATE		DELIVERY MODE		
12/11/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/516,462

**Applicant(s)**

IRI ET AL.

**Examiner**

JESSICA LAUX

**Art Unit**

3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 6 and 7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites in lines 4-5 a beam-side joint and a column-side joint; and then in lines 6-8 recites a joint structure for additional beam-side and column-side joints for (presumably, according the claim language) the same beam and column. Additionally the claim is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are the beam and column side joint connections as there are multiple connections claimed and no structure identifying the joint connection, rendering the claims confusing regarding the metes and bounds applicant claims has his/her invention.

Claim 2 recites the limitation "the beam-side joint" and "the column-side joint". There is insufficient antecedent basis for this limitation in the claim as it is unclear to

which joint of claim 1 (as noted above there are several mentioned in the claim) the limitations is referring.

Claim 3 recites:

the limitation "its opposite ends" in line 4;

the limitation "left and right end plates" in lines 10,11,13, 14,16,17

the limitations "opposite sides" of the other "end side" of the groove type plate (namely the opposite and end sides);

the limitations "end sides" of the stiffener plate;

There is insufficient antecedent basis for these limitations in the claim.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites in lines 10-12 inner surfaces of the end plates welded to opposite sides of one end of the groove-type plate; and then recites the end plates welded to opposite sides of the other end of the groove type plate. It is unclear how both end plates can have an inner surface welded to opposite sides of both ends of the groove type plate (from the claim language it appears there are multiple sets of left and right end plates);

and in lines 13-15 (relating to the left) and lines 16-18 (relating the to the right) an outer surface of the end plate is welded to an end side of the stiffener plate and then an outer surface of the same end plate is welded to a side of the other end side of a stiffener plate. It is unclear how the same end plate can have an outer side welded to opposite ends of a stiffener plate (especially in light of the previously recited limitations).

Claim s recites the limitations "the planned portion". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

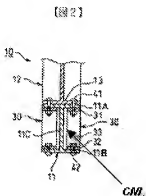
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-3, 7 as best understood in view of the above rejections are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent Application 11-324129.**

Claim 1: Japanese patent application 11-324129 discloses a steel framed building using a section steels, having the same cross section, for a column and a beam, having a beam-side and a column-side joint (figures1-3).

Claim 2: ...wherein the joints are connected by a bolt (41,42; figures 1-3).

Claim 3: Japanese patent application 11-324129 discloses a joint structure of a column-side joint for joining an end of a beam (generally 12) to a column (generally 11) comprising, a reinforcing member (30) joined in a cross section of the column by a bolt (41,42), and an end of the beam is joined with the reinforcing member by a bolt (41,42), the reinforcing member having end plates (31,32) and a groove type connecting member/plate having left and right stiffener members (33) (see CM in annotated figure below), the end plates being joined to flanges of the column by a bolt (as seen in figures 1-3).



Claim 7: ...wherein a bolt mounting hole (31A,32A,13A,21A) is provided in each of the planned portions of the plurality of the beam-side or column-side joints.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application 11-324129.**

Regarding claim 6: 11-324129 discloses the joint structure of a column and a beam according to claim 3 above, but does not expressly disclose that the groove-type plate has an X-shaped strengthening rib. However, it is notoriously common and well known in the art to have X-shaped strengthen ribs in support plates particularly plates used in structural applications. Therefore it would have been obvious to one of ordinary

skill in the art to modify the connector of 11-324129 to have Xshaped stiffening ribs to provide a stronger joint connection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA LAUX whose telephone number is (571)272-8228. The examiner can normally be reached on Monday thru Thursday, 9:00am to 5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot, Jr./  
Supervisory Patent Examiner, Art Unit 3635

/J. L./  
Examiner, Art Unit 3635